

# YLPP-1-150x5000-50-M

## Ytterbium Picosecond Fiber Laser

NEW PRODUCT



### Applications

- ▶ Materials Processing
- ▶ Micromachining
- ▶ Solar/ Photovoltaic
- ▶ Marking
- ▶ Texturing
- ▶ Ablation
- ▶ Scribing



### Features

- ▶ Pulse Energy up to 1 mJ
- ▶ Adjustable Pulse Duration
- ▶ High Peak Power up to 330 kW
- ▶ Repetition Rate up to 1 MHz
- ▶ Rugged Design

IPG's YLPP Adjustable Pulse Duration picosecond fiber laser provides up to 1 mJ of pulse energy at variable pulse durations ranging from 150 ps to 5 ns. The repetition rate range is from 30 kHz to 1 MHz. The all fiber format allows for the adjustment of pulse energy and/or pulse repetition rate without affecting any of the output beam parameters. This novel fiber laser is much more efficient and compact than conventional lasers now on the market and is ideal for applications in the solar/ photovoltaic arena, resistor trimming and marking of transparent materials. The ultrashort pulse duration and high peak power result in a very small heat affected zone.

# YLPP-1-150x5000-50-M

## Ytterbium Picosecond Fiber Laser

### Optical Characteristics

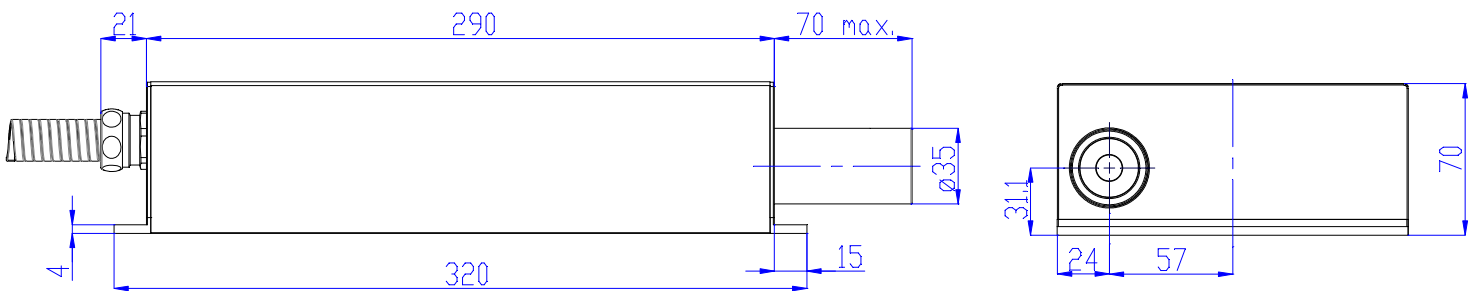
Wavelength, nm	1060			
Mode of Operation	Pulsed			
Average Power, W	50			
Power Tunability, %	10-100			
Pulse Energy, mJ	up to 1			
Pulse Duration Options, ns	0.15	1.0	2.0	5.0
Peak Power, kW	up to 330			
Repetition Rate <sup>1</sup> , kHz	600	100	60	30
Beam Quality, M <sup>2</sup>	<1.8			

<sup>1</sup> Extended pulse repetition mode up to 1 MHz

### General Characteristics

Control Unit Dimensions, mm	215 x 286 x 95
Optical Head Dimensions, mm	162 x 320 x 70
Control Unit Cooling	Air-cooled
Optical Head Cooling	Thermoconductive Bottom
Supply Voltage, VDC	24
Power Consumption, W	<250

### Head Dimensions



+1 (508) 373-1100; sales.us@ipgphotonics.com  
 +49 2736 44200; sales.europe@ipgphotonics.com (all European Inquiries)

[www.ipgphotonics.com](http://www.ipgphotonics.com)

**Legal notices:** All product information is believed to be accurate and is subject to change without notice. Information contained herein shall legally bind IPG only if it is specifically incorporated into the terms and conditions of a sales agreement. Some specific combinations of options may not be available. The user assumes all risks and liability whatsoever in connection with use of a product or its application. IPG, IPG Photonics, The Power to Transform and IPG Photonics' logo are trademarks of IPG Photonics Corporation. © 2015 IPG Photonics Corporation. All rights reserved.

